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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,092	08/15/2001	Alexander Joseph Babchin	51-15 US.CIP/PCT	8449
25319	7590	01/29/2004	EXAMINER	
FREEDMAN & ASSOCIATES 117 CENTREPOINTE DRIVE SUITE 350 NEPEAN, ONTARIO, K2G 5X3 CANADA			MAYEKAR, KISHOR	
			ART UNIT	PAPER NUMBER
			1753	
DATE MAILED: 01/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/929,092

Applicant(s)

BABCHIN ET AL.

Examiner

Kishor Mayekar

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 16-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 3-15 and 52-69 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1, 2 and 26-51, drawn to an apparatus, classified in class 422, subclass 186.
 - II. Claims 3-15 and 52-69, drawn to a method for controlling a chemical reaction, classified in class 204, subclass 164.
 - III. Claims 16-25, drawn to a method for controlling a chemical process, classified in class 204, subclass 164.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of either of Groups II-III and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice

another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice a process for treating gas.

3. Inventions of Groups II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions, the invention of Group II for controlling a chemical reaction of a liquid while invention of Group III for controlling a chemical process of a liquid behaved as a dielectric.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper and/or because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group III, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Attorney Mark Weir on December 22, 2003 a provisional election was made with traverse to prosecute the invention of II, claims 3-15 and 52-69. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1, 2 and 16-51 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 3 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the phrase "the chemical process" is lacking antecedent basis.

Regarding claim 52, the phrase "the chemical process" is lacking antecedent basis.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 6-8, 14, 52-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over THOMASON (6,267,933). The reference's invention is directed to a method of preparing and using electrostatically treated fluids. The reference

discloses in Fig. 3a, col. 21, lines 9-12 the recited steps a) and b). The difference between the reference and the above claims is the recited steps of detecting and controlling. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention as made to have modified the reference's teachings because "the provision of mechanical or automated means to replace manual activity was held to have been obvious", *In re Venner*, 120 USPQ 192.

As to the subject matter of claim 7, the reference discloses that such limitation is known in prior art (see Fig. 2b).

11. Claims 3-5, 8, 11, 13, 15, 52-61, and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over LAGUNAS-SOLAR et al. (6,638,475). The reference's invention is directed to a method for inhibiting pathogenic and spoilage activity in products. The reference discloses in Fig. 4 and col. 9, line 57 through col. 10, line 48, col. 13, lines 37-42, and col. 14, lines 6-13 the recited steps a) and b). The difference between the reference and the above claims is the recited steps of detecting and controlling. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention as made to

have modified the reference's teachings because "the provision of mechanical or automated means to replace manual activity was held to have been obvious", *In re Venner*, 120 USPQ 192.

12. Claims 3, 9-15, 52-55, 56-62 and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over BERGER (5,904,816). The reference's invention is directed to a process for the chemical modification of liquids containing alkyl groups by subjecting to a plasma treatment in a frequency range from 10 kHz to 10 GHz. The reference discloses in the abstract, col. 1, line 51 through col. 2, line 22 and col. 3, lines 16-31 the recited steps a) and b). The difference between the reference and the above claims is the recited steps of detecting and controlling. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because "the provision of mechanical or automated means to replace manual activity was held to have been obvious", *In re Venner*, 120 USPQ 192.

13. Claims 3, 9-15, 52-55, 57-62 and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over HOROWITZ (4,077,870). The reference's invention is

directed to a method for electrically cracking petroleum crude. The reference discloses in Fig. 1 and col. 5, lines 47-58 that the method comprises the recited steps a) and b). The difference between the reference and the above claims is the recited steps of detecting and controlling. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention as made to have modified the reference's teachings because "the provision of mechanical or automated means to replace manual activity was held to have been obvious", *In re Venner*, 120 USPQ 192.

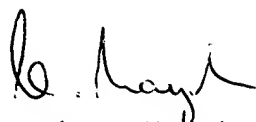
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1300.

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Kishor Mayekar
Primary Examiner
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